through various review mechanisms and, wherever felt necessary, the schemes are reoriented keeping in view the national priorities, and to bridge critical gaps.

(b) Revision of PG course curricula and syllabi was undertaken in 2009 and extant 95 P.G. courses were revised and reorganized into 83 courses. The agricultural universities have agreed to adopt the revised course curricula and syllabi. In accordance with Deans Committee Report, Agriculture Universities have adopted the revised syllabi for UG courses in Agriculture and Allied Sciences.

(c) During the Eleventh Plan, several new initiatives have been pursued to meet the emerging challenges in agriculture. In this endeavour, establishment of three new institutes has been initiated *viz.*, National Institute of Abiotic Stress Management (already established at Baramati, Maharashtra), National Institute of Biotic Stress Management, and Indian Institute of Agricultural Biotechnology (already approved in principle by Planning Commission and in the process of seeking approval). New tools of science such as marker assisted selection, gene prospecting and allele mining, gene knock down technology, bioremediation, nanotechnology, etc. have been incorporated in research, with due capacity building of scientists through national and international training programmes.

Effect of using chemical elements in farming

927. SHRI RAVI SHANKAR PRASAD:
SHRI SHIVANAND TIWARI:

Will the Minister of AGRICULTURE be pleased to state:

(a) whether it is a fact that as a result of agricultural revolution in the world in sixties, use of chemical elements in farming increased, environment got affected and the quality of produce decreased;

(b) if so, the reaction of Government thereto;

(c) whether there is a need to bring second revolution in the agriculture again; and

(d) if so, the important points which will have to be kept in mind while initiating research to bring in this revolution?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (PROF. K.V. THOMAS): (a) Judicious and balanced use of chemical inputs in agriculture does not affect the environment, soil health and quality of produce adversely. However, imbalanced use of fertilizer coupled with low addition of organic matter has resulted in deterioration of soil health particularly in the intensively cultivated areas of Indo-gangetic plains.

(b) The Government of India is promoting Integrated Pest Management (IPM) involving use of non-chemical methods such as, cultural, mechanical for plant protection and Integrated Nutrient Management (INM) envisaging soil test based application of chemical fertilizers in conjunction with organic sources of plant nutrients for sustainable soil health and productivity.

(c) and (d) The green revolution experienced in India paid rich dividends and the country became self-sufficient in food grains. The Eleventh Five Year Plan has set a target to accelerate agricultural growth to 4% per annum. The Plan envisages improving efficiency of investment, bringing technologies to the farmers and diversifying agriculture to enhance farmers' income while also protecting food security. The Plan also envisages greater focus on research in strategic areas to evolve cropping systems suited to various agro-climatic zones, and on raising the yield potential in rain-fed areas.

Death of animals due to Anthrax disease

928. SHRI ISHWAR SINGH:
SHRI VIJAY JAWAHARLAL DARDA:
DR. JANARDHAN WAGHMARE:
PROF. ALKA BALRAM KSHATRIYA:
SHRI MAHENDRA MOHAN:

Will the Minister of AGRICULTURE be pleased to state:

(a) whether Government is aware that a large number of cattle/animals have died in various parts of the country due to Anthrax disease;

(b) if so, the facts and details thereof;

(c) whether Government has conducted any survey in this regard to find out the exact cause of spread of Anthrax disease in animals; and

(d) if so, the details thereof and further steps contemplated to provide help to the State Governments to face the challenge of disease in animals?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (PROF. K.V. THOMAS): (a) and (b) Sporadic occurrences of Anthrax have been reported in animals. During the year 2008 and 2009 (up to June), 710 and 274 animals died due to this disease. State-wise details are enclosed as Statement (*See* below).

(c) and (d) Anthrax is zoonotic disease caused by a bacteria called *Bacillus anthracis* which produced spores. These spores survive in soil for years and under favorable conditions gain entry into the animal body causing the disease. Investigations are routinely carried out in the event of any outbreak by collecting samples from the sick/dead animals for microbiological analysis. The soil samples in the affected areas are also tested to determine the source of infection.

In the event of any outbreak following steps are taken to check the spread of the disease:—

- Vaccination of all susceptible animals within a radius of 10 Kms from the site of outbreak of Anthrax disease.
- Scientific disposal of carcass through burial
- Disinfection of the cattle shed and premises where outbreak has been confirmed.
- Creation of awareness among farmers in regard to the disease.